

PROJECT NUMBER: 8101
PROJECT TITLE: Cigarette Testing Services Division
SECTION LEADER: Joyce F. Stargardt
PERIOD COVERED: October, 1988

I. MARKET ACTIVITY

A. Objective: To monitor and report new brand introductions and brand modifications for the domestic and international cigarette markets.

B. Results:

1. Domestic

a. Premier

Premier 80 (Box) and Premier Menthol 80 (Box) from R. J. Reynolds were analyzed in our laboratories. The tobacco in these cigarettes is heated rather than burned, therefore the tar is quite different from that of a conventional cigarette. "Tar" is referred to as nicotine-free dry particulate matter (NFDPM) and is obtained by subtracting nicotine and water from the TPM. Cigarettes were lit by preheating statically on-line for 30 seconds with a Scripto Lighter until the first puff was taken. Some of the analytical data for Premier is listed below. More information can be found in a memo to J. E. Wickham entitled "Premier Cigarettes (R.J. Reynolds)".

	Premier 80 (Box)	Premier Menthol 80 (Box)
<u>Smoke</u>		
NFDPM, mg/cigt.	3.0	2.5
TPM, mg/cigt.	6.7	5.4
Nicotine, mg/cigt.	0.20	0.15
Water, mg/cigt.	3.53	2.77
Puffs/Cigt.	10.3	10.1
Menthol, mg/cigt.	ND	0.10
CO, mg/cigt.	10.0	10.4
Glycerine, mg/cigt.	2.9	2.9

b. New Brands

Brown & Williamson is test marketing Capri 120 Box (plain and menthol) cigarettes in New Orleans, LA. These cigarettes deliver 12 mg tar and 0.9 mg nicotine. The smoke menthol delivery is 1 mg. These cigarettes like Capri 100, have a 17 mm circumference.

The Liggett Group has introduced Eve Ultra 120 Box (plain and menthol) cigarettes. These cigarettes deliver 5 mg tar and 0.5 mg nicotine. The menthol smoke delivery is 0.4 mg. This is a brand extension of Eve Lights 120 currently on the market. Both cigarettes have a 21 mm circumference.

R. J. Reynolds has introduced new package graphics on Winston 80, 85 and 100, Winston Lights 85 and 100 and Winston Ultra 85 and 100 cigarettes. The eagle symbol is more prominent on the new package. During the past year Reynolds has changed the graphics on the Winston, Vantage, Salem, Doral and Century products. No changes were noted in the smoke deliveries of these cigarettes.

2. International

Japan Tobacco, Inc. introduced Caster Mild King Size cigarettes to the Japanese market on October 1, 1988. This brand delivers 6 mg tar and 0.6 mg nicotine. This makes three versions of Caster on the market in Japan.

R. J. Reynolds introduced Island Super Lights 85 in Japan on October 1, 1988. This brand delivers 8 mg tar and 0.6 mg nicotine. These product, like Island Lights 85, contains freon expanded tobacco.

Kent Special Milds King Size cigarettes were introduced in Japan on October 1. This brand is manufactured by Brown & Williamson for export to Japan. This brand delivers 10 mg tar and 0.8 mg nicotine and is the third version of Kent on the market in Japan.

II. ANALYTICAL METHODS DEVELOPMENT AND SUPPORT

- A. Objective: To evaluate and recommend analytical methods and new technology in support of programs for R&D and Manufacturing.
- B. Results:

The relationship of firmness to oven volatiles was analyzed at five relative humidity levels (40%, 50%, 60%, 70% and 75%) and 75°F for Marlboro 85 cigarettes. The resulting firmness "correction factor" was 0.39 mm, firmness/% OV for cigarettes manufactured at the Manufacturing Center in Richmond, Virginia. This number compares favorably with the 0.36 mm/% value reported by W. L. Mokarry in 1983. ("Cigarette Firmness Correction Factor," Inter-Office Correspondence, October 14, 1988, To J. E. Wickham)